



Leading by example,
saving energy and
taxpayer dollars in
federal facilities



Buying Energy Efficient Products

As the world's largest-volume buyer of energy-related products, the federal government can reduce energy consumption and achieve enormous cost savings by buying energy-efficient products. Executive Order 13123 directs federal buyers to purchase products that are ENERGY STAR® labeled or, if there is no ENERGY STAR label, to purchase products that are designated by the U.S. Department of Energy's Federal Energy Management Program (FEMP) to be in the upper 25% of energy efficiency in their class. In addition, Executive Order 13221 requires agencies to purchase low standby power devices. These requirements are codified in the Federal Acquisition Regulations (FAR) 48 CFR 23.203, and can be waived only if there is no efficient product that meets an agency's technical needs or if the efficient product is not cost-effective for a specific application.

Assistance with product procurement

FEMP helps federal purchasers identify efficient products, assists with specifying efficient products in capital projects and contracts, and provides buyers advice on everyday procurement decisions.

FEMP offers a series of *Product Energy Efficiency Recommendations* that identifies the efficiency levels needed to meet the criteria of Executive Orders 13123 and 13221 and the FAR. In addition to the efficiency levels for each product, FEMP's *Recommendations*:

- Identify federal supply sources that sell the product, such as the General Services Administration (GSA) or the Defense Logistics Agency (DLA), provided that the supply agency offers complying models and clearly identifies them.
- Offer buyer tips to help the federal purchaser (or specifier) select the right technology, size and install the equipment properly, and use it efficiently.
- Provide a cost-effectiveness example to aid the buyer in determining whether a first-cost premium for a more efficient model is justified in terms of life-cycle energy cost savings.

- List several organizations and publications that can be used to research each product more thoroughly.

Products covered by FEMP range from office fax machines and household dishwashers to water-cooled chillers and industrial luminaires. The *Recommendations* are published on FEMP's Buying Energy Efficient Products Web site at www.eere.energy.gov/femp/technologies/eeproducts.cfm. *Recommendations* for each product may be viewed online or downloaded in PDF format for printing. A CD-ROM collection of the *Recommendations* is also available on request for those who do not have Web access. Whenever there is a significant change in the market, the *Recommendations* are revised so that the recommended energy efficiency levels represent a market-leading threshold.



One valuable feature of the Buying Energy Efficient Products Web site is hot-links to lists

of models that meet the recommended efficiency levels. These lists, which are available for all ENERGY STAR-labeled products — about half of those covered by the *Recommendations* — identify efficient models by brand name and model number. The lists are accessible through the hot links at the bottom of each product's *Recommendations* page under "For More Information," or via the ENERGY STAR Web site at www.energystar.gov/products/.

Estimating energy cost savings

In addition to the tools provided by ENERGY STAR, FEMP has two analytical software tools to assist buyers with determining energy savings from energy-efficient products:

- FEMP and ENERGY STAR Energy Cost Calculators compute lifetime energy cost savings for specific products and applications. The calculators allow users to enter their own input values (e.g., utility rates, hours of use, etc.) to estimate the energy cost savings from buying a more efficient model.



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National average default values are also provided. The FEMP energy cost calculators are available at www.eere.energy.gov/femp/technologies/eep_eccalculators.cfm; the ENERGY STAR calculators are at www.energystar.gov/index.cfm?c=bulk_purchasing.bus_purchasing.

- FEMP Building Life-Cycle Cost (BLCC) software provides a detailed life-cycle cost analysis. For more information on the BLCC tool, visit www.eere.energy.gov/femp/information/download_blcc.cfm

Low standby power devices

As directed by Executive Order 13221, FEMP works with federal supply sources and ENERGY STAR to identify low standby power products. There are several clues federal buyers can use to help identify products that consume standby power. For example, products with the following features most often use standby power:

- An external power supply (e.g., laptops, cell phones, inkjet printers).
- A remote control (e.g., TVs, VCRs, and consumer audio equipment).
- A continuous digital display (e.g., microwaves and other appliances).
- A rechargeable battery (e.g., portable tools, exit signs).

In addition, most types of office equipment — including desktops, servers, monitors, printers, faxes, copiers — use standby power.

FEMP has created a database of products that comply with the low standby purchasing requirement. A link to this database is provided, along with the FEMP purchasing recommendation for low standby power products, at www.eere.energy.gov/femp/technologies/eep_standby_power.cfm

Making energy efficiency “standard practice” in the federal government

In addition to publishing the *Product Energy Efficiency Recommendations* and keeping an active schedule of agency outreach and training, FEMP supports energy-efficient federal purchasing in two other ways:

- Adding efficiency criteria to federal guide specifications. Guide specifications are the agency-

wide specifications that determine which products will be used in federal construction and major renovation projects. A number of federal agencies that engage in significant amounts of construction develop their own specifications. For example, the Department of Defense created and maintains a set of Unified Facilities Guide Specifications (UFGS). The UFGS now incorporate FEMP *Recommendations* on motors, commercial packaged air conditioners, chillers, and various lighting products. Finally, the Environmental Protection Agency is including ENERGY STAR and FEMP recommendations in its new “Green Specs” series. The UFGS and Green Specs are available from the Whole Building Design Guide, at www.wbdg.org.

- Identifying efficient products in federal supply agency catalogs. GSA and DLA have special programs to highlight the models that comply with ENERGY STAR and FEMP-recommended efficiency levels. Vendors selling products on the GSA schedules through the agency’s online shopping network, *GSA Advantage!*, are asked to highlight their complying models with the ENERGY STAR symbol. Similarly, in the Federal Logistics Information System (FLIS), DLA’s product database, cataloguers highlight energy-efficient models by assigning them an “environmental attribute code”. FLIS is the basis of several electronic sales catalogues (e.g., FEDLOG), where the environmental attribute code also can be found.

For more information:

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www.eere.energy.gov/femp/technologies/eeproducts.cfm

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A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy’s Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.



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Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

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